

MYPT1 (phospho-T696) polyclonal antibody

Catalog: BS64148

Host: Rabbit

Reactivity: Human, Mouse, Rat

BackGround:

Myosin phosphatase target subunit 1 (MYPT1), also called Myosin-binding subunit of Myosin phosphatase, is one of the subunits and an integral component of the Myosin phosphatase. Myosin phosphatase regulates the interaction of Actin and Myosin downstream of the guanosine triphosphatase Rho, which inhibits Myosin phosphatase through the action of Rho-kinase. MYPT1 promoter contains one Sp1 transcription factor binding site, suggesting that MYPT1 is a housekeeping gene. Myotonic dystrophy protein kinase phosphorylates MYPT1 at Tyrosine 654 to regulate Myosin II phosphorylation. Inhibition of Myosin light chain phosphatase results in Ca²⁺ sensitization of smooth muscle contraction. This inhibition is modulated through phosphorylation of MYPT1 by a ZIP-like kinase, which associates with MYPT1 and phosphorylates the inhibitory site in smooth muscle. The phosphorylation of MYPT1 by protein kinase C results in altered dephosphorylation of Myosin by attenuating the binding of protein phosphatase 1 catalytic subunit (PP1c) and the phosphorylated Myosin light chain to MYPT1. PP1c interacts with at least four binding sites on the amino-terminus of MYPT1.

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

Molecular Weight:

~ 115 kDa

Swiss-Prot:

O14974

Purification&Purity:

The antibody was affinity-purified from rabbit antiserum

by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

Applications:

WB: 1:500~1:1000

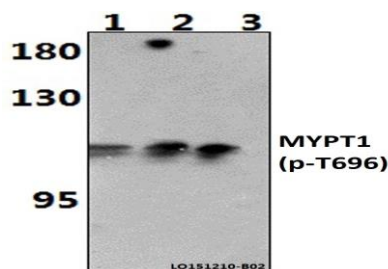
Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

Specificity:

MYPT1 (phospho-T696) polyclonal antibody detects endogenous levels of MYPT1 protein only when phosphorylated at T696.

DATA:



Western blot (WB) analysis of p-MYPT1 (T696) polyclonal antibody at 1:500 dilution

Lane1: HEK293T whole cell lysate (40ug)

Lane2: HEK293T treated with PMA (60ng/ml, 10min) whole cell lysate (40ug)

Lane3: HEK293T treated with UV (4h) whole cell lysate (40ug)

Note:

For research use only, not for use in diagnostic procedure.

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